

WHAT IS CLAIMED IS:

1. A light quantity adjusting device
comprising:

an annular rotary member having a magnetizing
5 portion in a plane that is parallel to a radial
direction of the annular rotary member;

an annular coil disposed in an outer diameter
side or an inner diameter side of the rotary member;

an annular first stator disposed in a direction
10 that is orthogonal to a radial direction of the
rotary member, the annular first stator comprising
first magnetic pole portions that oppose the rotary
member;

an annular second stator disposed in a
15 direction that is orthogonal to the radial direction
of the rotary member, the annular second stator
comprising second magnetic pole portions that oppose
the rotary member from an opposite side of the first
magnetic pole portions; and

20 one or more light controlling members that are
disposed between the rotary member and the first
stator and/or between the rotary member and the
second stator and that move into, and out of, a light
path according to rotation of the rotary member,
25 controlling the quantity of light that passes through,
the light path being a path for light passing
therethrough opening portions of the rotary member,

the coil, the first stator, and the second stator.

2. A light quantity adjusting device according to Claim 1, wherein the surface area of an opening
5 portion formed in the light path is changed by moving the one or more light quantity controlling members into and out of the light path.

3. A light quantity adjusting device according
10 to Claim 1, wherein the one or more light quantity controlling members are semitransparent members, and the transmittance of the light path is changed by moving the one or more light quantity controlling members into and out of the light path.

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4. A light quantity adjusting device according to Claim 1, wherein the one or more light quantity controlling members are formed by using a non-magnetic material.

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5. A light quantity adjusting device according to Claim 1, further comprising a bobbin that winds around the coil, wherein the magnet and the bobbin are positioned to be superimposed over their entire
25 circumferences when seen from a center axial direction.